

In cases of the so-called "atony of the intestine," the hypo-peristaltic type, the above regime is as efficacious as in the cases of hyper-peristalsis. It is interesting to note that a careful study of many cases of the atonic or hypo-peristaltic intestine shows they have unquestionably passed through the stages of hyper-peristalsis or hyper-sensitive intestines and colons.

Where we have reason to suspect that part of the intestinal condition is due to an inability of the patient to properly digest carbohydrates, better results are obtained by limiting but not entirely excluding the carbohydrate intake.

Too much attention should not be placed on the slight amounts of excess mucus, fat, starch and undigested meat fibers that are so often found in the stools. It is to be expected that in a hyperperistaltic intestine and colon where the nerve endings are in a hypersensitive condition that an excess of mucus will be poured out, and when the material goes too rapidly through the intestine excesses of fat, starch and undigested meat fibers will be present. In constipation where the stools are hard there is always an excess of mucus poured out in the attempt to coat these masses and to enable them to be expelled more easily. The real cause, the disordered intestinal mechanism, should be treated, not the symptoms. Allow the normal mechanism of the intestines and colon to return and these excesses will disappear from the stools. In a similar way the bacterial flora will be improved.

Ultimate recovery is assured in these patients. They leave the hospital well nourished, free from intestinal distress and having normal stools daily without artificial aid. They are educated in the normal way in which to live and are taught to regulate the amount of bulk and irritating material in the diet, using the consistency of the stools and the absence of intestinal distress as indications for varying the amount of bulky and irritating items of diet. Patients are seldom in the hospital over three weeks and often only ten days to two weeks.

In conclusion I would place emphasis on the following:

There is a small field, if any, for the therapeutic use of artificial stimulants in the treatment of chronic intestinal disease.

The abnormal intestinal function should be recognized and aided to again become normal.

The best method is to combine physical, mental and metabolic rest with soothing treatment, allowing the intestine to regain its normal tone and reaction.

Surgeons should be more cautious in the use of artificial intestinal stimulants in the post-operative care of patients. They should insist that the normal intestinal function be re-established if it has been disturbed before allowing the patient to leave the hospital.

The general public should be better instructed as to the management of their intestinal conditions.

(Santa Barbara Clinic.)

GROUP MEDICINE—A DISCUSSION OF ITS VALUE TO THE PROFESSION AND THE PUBLIC

By DONALD J. FRICK, M. D., Los Angeles.

In the last twenty years through the advancement of knowledge by the professions and the appreciation of this by the public, it has become necessary to specialize to get the highest efficiency. In law it would be hard to find a man willing to attempt to carry a client through a criminal action, draw up articles of incorporation for a big company, pass on a bond issue and draw up a will. If you did find a man willing, you would not trust him, for you would know that he could not possibly possess the information and technique to cope successfully with all these problems. Engineering long ago developed its specialists in mining, electricity, hydraulics, construction, chemistry, etc. We take our problem to the appropriate place without question, knowing that general engineering is an impossibility. The other learned professions have kept pace of a necessity.

Medicine has had specialists in certain branches for a number of years, but only in the last few years has the human body been divided up into small sections and allocated to the different members of our profession. This is a necessity, for the capacity of one man's brain and time are unfortunately limited. With specializing in medicine have come grave problems which must in some way be solved. The correlation of the organs in the body does not allow of independent action by the different specialists without due regard to pathological conditions outside their own fields of action. The specialist cannot be a specialist and a general practitioner, so there can be no way for him to judge of conditions outside his own field except from the reports of other specialists. Unless there is organization among specialists, efficiency and time are lost to the patient and to the profession.

Keeping in mind these facts we must realize that group medicine of one type or another is a necessity. This is the reason that this subject has been under constant discussion wherever medical men have met.

Leaders in medicine, Drs. William Mayo, Billings, Barker, and others, have presented the different angles of the subject with such wisdom that a great deal that has to be said here must of necessity sound familiar and hackneyed.

Different types of groups are being worked out with more or less success. We will briefly discuss the principal types and their advantages and disadvantages.

1. Groups made up of physicians and surgeons with all the allied specialties, having common interests medically and financially.

- (a) Built around an outstanding man.

- (b) Built up by the association of a number of good men in a community who have succeeded in their own lines.

- (c) Built around a college or hospital.

- 2, Groups who limit their work to surgery.
3. Groups who limit their work to internal medicine.
4. Diagnostic groups whose members function together for the purpose of diagnosis only.

VALUE TO THE PROFESSION

Theoretically and practically we shall have to concede that each of these types of groups is, from an educational standpoint, advantageous to the physician who is a member of the group. He cannot help being broadened by constant contact with other men, who, in a wholesome way, offer criticism upon his work.

Which of the above plans offers the most to the profession?

(1a)—The general clinic built around one man has outstanding advantages for those who are to follow the leader's bent. A great surgeon will inspire everyone about him to do the best in surgery while with him, and the fire of his genius will for all time burn in the hearts of his students. But medicine in all its branches can only take a mean position in such environment. Murphy was a maker of surgeons; Osler a maker of physicians.

(1b)—A clinic made up of a number of successful men is a great help to everyone in it, if histories are well taken, discussion of cases and results are systematically carried out, and each man gives his best to it. Unfortunately, it cannot rise above the mean between the best and poorest individual in the group. The weak man will be definitely helped, but genius will have a difficult time thriving.

(1c)—A clinic built about a college and hospital is of all types of groups the most beneficial for the profession and the members of the group. Working in a free clinic and teaching students afford the best training both for the mind and the soul. A man who cares for numbers of people with only one type of reward, the addition to his store of knowledge, grows fast and in a healthy manner. Teaching students, nurses, and physicians fixes facts in his mind and makes him careful of the source of his knowledge as nothing else does.

The financial returns from any of these types of clinics can be made adequate for all needs. Riches should neither be expected nor desired in a profession.

(2 and 3)—Medical and surgical groups are useful because they afford the members opportunity to consult with each other, to divide the expenses of a modern plant, to live and breathe like human beings rather than to be constantly on call with no respite from duty. Because if a man is a true physician, he will not undertake a case except with the belief that it is his duty to provide proper attention at all times. A group does that in the best way. Individual attention is not necessarily an advantage.

(4)—Diagnostic groups have doubtful value to the physicians who compose them. The patient goes through the mill and is sent back to his physician. The diagnosis may be correct or not. In

most cases no one will ever know. The procedure is unsatisfactory and oftentimes unscientific.

VALUE TO MEDICINE

Will group medicine advance the science of medicine? Commercial group medicine can do this only along certain lines, namely, in compiling statistics from series of cases. These statistics will retard or help progress depending upon their foundation and accuracy. Careful recording of symptoms and signs in the past and present history with all the clinical data gained from the many possible means of modern diagnosis and treatment must advance our knowledge of disease. But the process has its limitations due to the necessary routine, the hurry and bustle which do not allow time for restful, constructive thought. The group in a college or endowed hospital allows periods of rest. These give the individuals time to correlate their thoughts before imparting their knowledge to others. Competition is keen in every department. Honor comes to him who advances his services above the others by the application of constructive thinking along a certain line. Medical discoveries have, as a rule, come from men who were able to concentrate along one line without being hampered by the details of routine and money-making.

VALUE TO THE PATIENT

Does group medicine offer definite advantages to the patient? It cannot be denied that all of the types are of marked value to the patient. No one can possibly specialize in all branches or become skilled in all of them. A well-balanced clinic should be able to pass a patient from one department to another rapidly, and discuss all his abnormalities. Because of bulk of work done, the best of equipment for all purposes would be available. Expert technicians in all departments under medical heads could be procured. The patient's comfort, time and pocketbook could be conserved by appropriate organization. The proper correlation and evaluation of all the facts established regarding the patient's condition, and a just decision as to treatment indicated, must be rendered by a wise and experienced head if the maximum benefit is to accrue to the patient. In our opinion, a leader of more than ordinary ability is needed in every group if the patient is to derive the greatest value from the study of his case. A patient may travel from one specialist to another in any city of moderate size and have some abnormality corrected at every stopping place, and finally come to the end of his journey little better than he was in the beginning. In the same way he may be carried through a group and the obvious abnormalities be removed, but he may be no nearer cured of his complaint than he was in the beginning, unless diagnosis and treatment are brought into unity.

Lay diagnosis has become an established custom. Dr. S. makes a careful study of Mrs. G., who has asthma. He goes over every organ, does all the foreign protein tests, the pollens, the foods, the bacteria, and finds all of them negative. He

has radiographs made of her sinuses, finds a chronic maxillary sinusitis, and is able to express pus from her tonsils. By elimination he decides that the sinusitis and chronic tonsillitis are responsible for Mrs. G.'s asthma. She is sent to a specialist, who removes her tonsils and drains her sinuses, and her asthma is cured. Mrs. G. goes along through life happily, and every asthmatic she sees she sends to a specialist for tonsillectomy and sinus drainage. In the opinion of the average specialist, not all by any means, a diseased organ that comes in his special line must come out. So Mrs. G.'s asthmatic friends usually find a willing specialist who relieves them of part of their anatomy. Occasionally one will be cured, but the seasonal asthmatic, the food-sensitive asthmatic, the cat or dog-hair asthmatic is not helped in the least, but is likely to lose faith in medicine because medical procedures in her case were not scientific.

This is not a criticism of ear, nose and throat men. It is a criticism of isolation of specialists and the treatment of organs instead of the patient. Group medicine will go a long way toward curing this situation, but it would seem wise before any procedure in a clinic is undertaken, that someone more or less versed in all phases of medicine go over the findings and decide the relative value to the patient of all remedial measures contemplated. Routine histories, physical examination, laboratory and X-ray examinations, will, of course, help guide us in solving the perplexing question of what should be done.

All three groups of the first type will be of use in eliminating the evil of isolated treatment. The last group, that connected with teaching, will do its work best, because those who teach must tell why a patient comes into the clinic and why a given procedure should benefit him. In this connection it seems possible that any group may be a teaching group if it will use the nurses in the hospital as proper students.

Medical groups and surgical groups may help distinctly if they have strength of character enough to send from their groups patients who need attention that they cannot give. Medical groups are, as a rule, dominated by diagnosticians who should have enough special help to find abnormalities. With the facts at hand, such a group can send patients to definite specialists for treatment, which, in the nature of things, should be curative or palliative for that patient. Surgical groups with the proper surgical diagnosticians can perform wonderful and lasting benefit if they will limit their sphere to constructive surgery.

DISADVANTAGES TO PATIENTS

We have discussed the advantages of group practice to the patient. Are there disadvantages? There are definite drawbacks to any of the present plans. If all physicians were molded into groups, patients would only have the choice of a group and not of a man. To be useful to a patient a group should study him thoroughly on his first appearance and then carry him along through any and all subsequent illnesses, adding to his history at

his every appearance. If this were systematically done a patient would have immediate scientific care in any emergency. To make this efficient, however, he should not have his appendix removed by Dr. R. of Group A, his tonsils removed by Dr. S. of Group B, and end his surgical career by going to Dr. T. of Group C. for a prostatectomy. Drs. R., S., and T., may be the best men in their lines, but by going from one group to another he loses the efficiency gained by staying with one. Patients, however, as a rule, want the best. Group medicine of type 1 would keep them from having that at times.

The personal element in medicine would be largely eliminated. Many patients need boosting and stimulation to get well. Perplexing problems at home must be solved, and often it is only by sweeping away these worries that we may start a patient on the road to recovery.

The cost of a thorough examination by a group is proposed by some as one of the disadvantages of group practice. If any one of you will sit down and go over with one of your chronics the amount of money he has spent on different drugs and cults before even an attempt at diagnosis of his case has been made, you will realize that he ought to be willing to pay for a definite diagnosis with proper instructions for getting well. Cost can be so regulated that it will not be prohibitive to anyone.

Groups cannot take the place of the old family physician, but no man alone can do this today. In days gone by the family physician could embrace practically all of human medical knowledge and not stagger under the load. Anyone nowadays who tries to do so becomes a sorry mediocre misfit. Therefore, it has come to pass that the physician with a family practice performs all the hard work and loses the lucrative work to the specialist. The result is that only a few remain competent and clear-headed under such abuse. For one family to rely upon a single medical advisor is ideal, but not practicable.

What effect have groups on the profession at large? Groups of the 1a type (built around an outstanding man) and 1b type (made up of outstanding men in the community) become, as a rule, bones of contention if located in a city of any size. Because they are doing all kinds of work, they continually step on the toes of individual doctors. They do not refer work, so work is not referred to them. The family physician feels it most, as groups can carry families as a whole. On the other hand, type 1c, connected with a teaching hospital, is a great impetus to every doctor in the community because it holds out to him the opportunity to increase his own medical efficiency. New facts are constantly brought to the attention of those living near a group that is doing constructive work. The profession will respect the man who is giving his time to the advancement of the art of healing, and will bear him no malice.

We cannot help feeling that every section of this country would be made better by the influence of a group of medical men constructed about

a teaching, endowed hospital. Unfortunately, every community cannot be provided with such advantages, and the solution for the less fortunate communities lies in the construction of groups which will serve as well as possible the needs of its territory. Cities should strive to provide teaching hospitals. Country districts may well have groups working about a standardized hospital, the older experienced men doing the hospital work, the younger men for their first five years at least, making the outside calls and night drives, and caring for the emergencies. After these men have served their apprenticeship they may begin the study of a specialty with some basis and assurance of being really useful. The older men would be relieved of the drudgery and the science of medicine would advance decidedly in service and the respect of the people.

A liberal policy must be adopted. Sick people require better, more efficient care. Physicians need every possible means to keep abreast of the progress of medicine. Group medicine is a step forward in reaching these goals.

THE PATHOLOGY AND BACTERIOLOGY OF EXCISED TONSILS AND THE EFFECT OF X-RAY THERAPY UPON THE BACTERIAL FLORA OF TONSILS.*

By FRANKLIN R. NUZUM, M. D., Santa Barbara, Cal.

Following the report of Murphy, Witherbee and their co-workers on the effect of small doses of X-rays on hypertrophied tonsils and other lymphoid structures of the naso-pharynx much consideration has been given to this subject. A subsequent paper by Witherbee states that all of five hundred patients treated, not alone for hypertrophied tonsils, but for chronic infected tonsils, were so benefited that surgical removal was not necessary. This and similar reports have led to a debate between Roentgen therapists and nose and throat men as to the merits of X-ray therapy in tonsillar conditions.

Since the question is one of importance it seemed that a careful study of the subject by persons impartially interested in both the X-ray and the surgical side of the question would be a logical procedure in arriving at a fair conclusion.

With this in view we have undertaken a correlated study of the symptomatology of 218 patients upon whom tonsillectomy had been done and of the pathology and bacteriology of the excised tonsils. A study was then made of a smaller group of patients whose tonsils had been treated by X-ray. In this group the gross appearance of the tonsils, their change in size, and the bacterial flora before, during, and after treatment were recorded.

In recording the pathology of chronic tonsillar infections the plan of J. J. Moore has been used. He recognizes the following three pathological divisions of tonsillitis: Type 1. Chronic lacunar

tonsillitis, the changes occurring in the epithelial lining of the crypts. Type 2. Chronic interstitial tonsillitis, characterized by a connective tissue increase of the stroma in the parenchyma of the organ. This type includes both atrophic fibrous tonsils and hypertrophic tonsils. In the latter, in addition to an increased stroma, there is also an increase in the number and size of the follicles, encroaching on lymphoid tissue. Type 3. Chronic peri-tonsillitis, characterized by an increase of the fibrous tissue capsule and peritonsillar tissue.

The relation between foci of infection and systemic disease has been widely recognized. The frequency and importance of streptococci as the predominant organism in such foci has likewise been emphasized. In bacteriological studies of infected tonsils, streptococci, and especially hemolytic streptococci, have assumed more prominence than other organisms.

In our study we have used the bacteriological technique advocated by J. H. Brown. Both streaked blood agar plates and poured blood agar plates were used. Single colonies were fished from these plates and transplanted on blood agar slants. Bile solubility and the use of various sugar media were employed in making a final classification of various colonies.

We have used Brown's plan of classifying streptococci. This places all streptococci into four groups, depending upon their manner of growth in blood agar plates. Alpha hemolytic streptococci are characterized by a small zone of brown or green discoloration immediately about the colony. Alpha prime hemolytic streptococci have immediately about the colony a small area of incompletely haemolyzed red blood cells. Beyond this is a ring of complete hemolysis. Beta haemolytic streptococci is that group which has a zone of complete haemolysis immediately about the colony. This clear zone varies from 1 to 4 mm. in width. The fourth, or final, division of streptococci are the non-haemolytic colonies. They appear as small, dark dots and produce no gross change in the adjacent blood corpuscles of the media.

There is a wide discrepancy in the frequency with which haemolytic streptococci have been reported by previous workers. A large group have reported them as present in 45 to 50 per cent of all tonsils. A small group have found them in 90 to 97 per cent. We have used both streaked and poured plates. A sterile swab was drawn across the surface of one tonsil. It was then dipped into 1 cc. of sterile physiologic salt solution. A platinum loop bent at a right angle near its distal end was then introduced into a crypt, withdrawn, and dipped into a second tube containing 1 cc. of sterile physiologic salt solution. A few drops of each of these inoculated solutions were then poured into petri dishes and 12 cc. of liquid blood agar added. The petri dishes were gently agitated until the salt solution had become well mixed with the blood agar and put aside to cool, after which they were incubated for forty-eight hours. Streaked blood agar plates were made from the same material and incubated.

* From the Clinic of the Santa Barbara Cottage Hospital.